

Appln. No. 10/660,543
Amendment Dated April 5, 2007
Response to Office Action of March 23, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

Claim 1. (amended): An apparatus for measuring the distance traveled along an arcuate path by a movable object, said apparatus comprising:
a member movable along a fixed arcuate path to a position along said path corresponding to the relative position of the object;
a plurality of spaced contacts insulated from one another and positioned along at least one side of said path, said movable member contacting one of said plurality of contacts at the current position of said movable member along said arcuate path;
data-storing means including a corresponding plurality of memory locations each of which stores preset, different distance- measurement data;
means coupled to each of said plurality of contacts for respectively electrically connecting each of said plurality of contacts to each of said memory locations, each of said distance-measurement data stored respectively in said plurality of memory locations being uniquely associated with the relative location of said plurality of contacts along said path;
output means connected to said data-storing means; and
means connected to said plurality of contacts for applying a control signal to the one of said memory locations that is connected to the one of said plurality of contacts then in contact with said movable member, said control signal being effective to transfer the distance-measurement data stored in the said one of said memory locations to said output means;
whereby said movable member is effective as it moves along said path to cause only the distance-measurement data stored in the said one of said memory locations to be applied to said output means.

Claim 2. (previously presented) The apparatus of Claim 1, in which said output device is a display device.

Claim 3. (previously presented) The apparatus of Claim 1, in which said output device is a CPU.

Claim 4. (previously cancelled) The apparatus of Claim 1, in which said contacts are arranged in an arcuate path.

Claim 5. (previously presented) The apparatus of Claim 1, in which said movable member is connected at one of its ends to a voltage source and its other end is movable along said arcuate path to make electrical contact with one of said contacts.

Claim 6. (previously withdrawn) The apparatus of Claim 1, in which said contacts are arranged in a rectilinear path.

Claim 7. (previously withdrawn) The apparatus of Claim 6, in which said member is movable along said rectilinear path for making contact with aligned pairs of said contacts at each of its ends.

Claim 8. (previously presented) The apparatus of Claim 1, in which said data-storing means is a ROM.

Claim 9. (amended) The apparatus of Claim 1, further comprising a voltage source, said member being effective when in electrical contact with one of said contacts to place one of said memory locations in circuit arrangement with said voltage source and to provide said control signal to said one of said memory locations.

Claim 10. (previously presented) The apparatus of Claim 9, in which said output means is a display device.

Claim 11. (previously presented) The apparatus of Claim 9, in which said output means is a CPU.

Claim 12. (previously cancelled) The apparatus of Claim 9, in which said contacts are arranged in an arcuate path.

Claim 13. (previously cancelled) The apparatus of Claim 12, in which said movable member is connected at one of its ends to said voltage source and its other free end is movable to make electrical contact with one of said contacts.

Claim 14. (previously withdrawn) The apparatus of Claim 9, in which said contacts are arranged in a rectilinear path.

Claim 15. (previously withdrawn) The apparatus of Claim 14, in which said member is movable axially along said rectilinear path for making contact with aligned pairs of said contacts at its ends.

Claim 16. (previously presented) The apparatus of Claim 9, in which said data-storing means is a ROM.

Claim 17. (amended) A method for determining the distance traveled by a movable object along an arcuate path, said method comprising the steps of:
arranging a plurality of fixed, spaced and insulated contacts along at least one side of a fixed arcuate path;

moving an electrically conductive member along said path by an amount representative of the relative movement of said object, thereby causing said movable member to make electrical contact with one of said contacts;

storing respectively a corresponding plurality of different preset distance-measurement data in a corresponding plurality of data-storing locations in a memory, the distance-measurement data stored in said plurality of data-storing locations being respectively uniquely associated with one of said plurality of contacts;

electrically connecting each of said plurality of contacts respectively to each of said plurality of data-storing locations through a corresponding plurality of conductors; causing a control signal to be applied over one of said plurality of conductors to the one of said data-storing locations associated with, and connected to, the one of said plurality of contacts then contacted by said movable member and thereby causing the distance-measurement data stored in said one of said data-storing locations to be applied to an output device.